

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

NOTICE OF ADJUSTMENT OF THE RATES OF KENTUCKY-AMERICAN WATER COMPANY))	CASE NO. 91-361
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O R D E R

IT IS ORDERED that Kentucky-American Water Company ("Kentucky-American") shall file the original and 12 copies of the following information with the Commission by February 7, 1992 with a copy to all parties of record. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided along with the original application, in the format requested herein, reference may be made to the specific location of said information in responding to this information request. When applicable, the information requested herein should be provided for total company operations and jurisdictional operations, separately.

1. Referring to the response to Item 1 of the Commission's January 10, 1992 Order:

a. Explain when and how management determined that "customers" was the most appropriate single allocator to use.

b. Describe what other possible allocators were considered and provide the results of any analysis showing these alternative allocators to be inappropriate.

c. Was Mr. Work involved in the analysis that resulted in the management decision to use "customers" as the single allocator of service company expenses?

2. Referring to the response to Item 3 of the Commission's January 10, 1992 Order:

a. Explain why data prior to 1981 for service company expenses, number of customers, net utility plant in service, water sales, and employees was not available.

b. Explain whether a regression analysis based on 10 years of data is preferable to one based on 15 or 20 years of data.

3. Referring to the response to Item 9 of the Commission's January 10, 1992 Order, the regression results for six of the separate expense classifications (i.e. customer relations, secretarial, engineering, customer billing, data processing, and authorization/maintenance) indicate that none of the independent variables examined, including "customers," are significantly related to the dependent variable.

a. For each of these six expense classifications, provide an analysis of the regression results. Specifically discuss whether or not any significant relationships exist between dependent and independent variables.

b. For each of these six expense classifications, explain whether other independent variables should have been used in the regression equation. Identify any alternative independent variables.

c. Based on the regression results for these six expense classifications, explain why it is appropriate to use "customers" as an allocator for each of these expenses.

4. On page 15 of his direct testimony, Cecil Sasher states that the American Water Works Service Company ("Service Company") provides Kentucky-American the following customer billing services: (1) programming; (2) printing and mailing out all bills (e.g., regular, final, and partial); (3) past due collection notices; and (4) the storing of billing information for use in preparing billing analysis and reports.

a. Besides those listed above, does the Service Company provide any other customer billing services to Kentucky-American?

b. Besides those listed above, does the Service Company provide any other customer billing services to its other operating subsidiaries?

5. On pages 16 and 17 of his direct testimony, Mr. Sasher cited an example of two companies with the same number of customers, with one billing monthly and the other quarterly. In Mr. Sasher's example, allocating the shared billing expenses based on the number of bills resulted in the company using monthly billing being allocated 75 percent of the cost, while allocating the costs based on the number of customers would evenly divide the

cost. Mr. Sasher stated that, "For this reason, I believe that the use of customers is a better allocator to use than bills." Is this the only justification that can be given for using the number of customers rather than number of bills for allocating the Service Company billing charges?

6. On page 18 of his direct testimony, Mr. Sasher stated that the 1971 customer billing system required the Service Company's keypunch operators to manually input individual data for each and every customer bill. Mr. Sasher added that this system was replaced with utilicorders which allows meter reading information to be directly inputted into the Service Company's computer system. Given that the level of manual work performed at the Service Company has decreased, explain why Kentucky-American has not experienced decreased allocations of data processing charges.

7. The Dismissal Order of the Commonwealth of Virginia's State Corporation Commission ("Virginia Commission") in Case No. PUA88005,¹ required the Virginia-American Water Company ("Virginia-American") to file a schedule of information to support the use of the number of customers as a general allocator. Virginia-American was required to file the schedules with the Virginia Commission on or before April 1, 1990 and annually by

¹ Case No. PUA88005, The Application of Virginia-American Water Company for Authority to Enter Into Service Agreement with Affiliate, Order entered November 17, 1988.

April 1 thereafter, until otherwise directed. Provide a copy of the 1990 schedule Virginia-American filed with the Virginia Commission and when available provide a copy of the 1991 schedule.

8. Is Kentucky-American or the Service Company aware of any other company besides itself, that allocates its indirect or overhead costs to its subsidiaries based on a single factor allocator?

9. On page 8 of his direct testimony, Dwight Work stated that it could not be concluded that "customers" is the best one-factor allocator to use for Service Company and corporate expenses. Is the regression analysis used by Mr. Work then only a means to show that a relationship exists between two variables and, in this case, to illustrate the reasonableness of the allocation methodology, not whether "customers" is the best one-factor allocator or the use of a single factor is the best allocation methodology?

10. Refer to the Comprehensive Management and Operations Audit of Kentucky-American Water Company ("Management Audit Report") issued June 1991, Recommendation IX-R17, "Review the appropriateness and fairness of the 1989 change in billing methodologies on the charges to Kentucky-American from AWWSCo.," pages 279 and 280:

a. On page 280 the Management Audit Report stated that, "[T]he overall appropriateness and fairness of the new allocation methodology should be the subject of further review," and that "The criteria for evaluating appropriateness and fairness, the specific steps to be taken, and the resultant

analysis should be discussed with and provided to the Kentucky Public Service Commission." In reference to the Management Audit Action Plans filed August 16, 1991, what steps has Kentucky-American taken to date and what steps will it take to review the appropriateness and fairness of its 1989 Service Company Agreement? Will Kentucky-American seek the Commission's involvement in this review process?

b. On that same page the Management Audit Report made the following suggestion, "What might be considered is an allocation methodology not as dramatically opposed as either the old method (with its "100-formula" plan) or the new method (with its one-formula plan); rather a compromise method of five to 10 formulas. This compromise method should continue to reduce complexity, but should not be overly reliant on any one basis." Has or will Kentucky-American attempt to formulate such a plan or will it continue to follow its 1989 Service Company Agreement?

11. On page 20 of its Order in Case No. 90-321² the Commission noted that, "The problem with the Service Company's approach is that it has allocated all costs in the same manner without looking at the underlying characteristics of each cost separately." Explain why Kentucky-American has not rectified or addressed this problem with its 1989 Service Company Agreement.

² Case No. 90-321, Notice of Adjustment of the Rates of Kentucky-American Water Company effective on December 27, 1990, Order dated May 30, 1991.

12. a. In performing the Service Company regression analysis contained in his direct testimony as Exhibit DSW-1, Schedule 1, did Mr. Work use the total Service Company expenses or only the expenses that were allocated?

b. If the total Service Company expenses were used, what effect, if any, would eliminating the direct Service Company expenses have on the regression analysis?

13. a. With total Service Company charges as the dependent variable, for each separate expense classification listed in Format 1, attached hereto, perform regression analyses with the following independent variables: (1) gross revenue; (2) total payroll; (3) total assets; and (4) total number of vouchers issued. Follow the same form as Kentucky-American's response to Item 9 of the Commission's January 10, 1992 Order.

b. Kentucky-American's response to Item 9 of the Commission's January 10, 1992 Order did not include regression analyses for the expense category employee relations. Perform a regression analysis for this classification for those five variables used in that response and the four variables listed in 13(a) above.

c. Provide a summary of the regression analyses of the Service Company charges performed in response to 13(a) and 13(b) above, and Item 9 of the Commission's January 10, 1992 Order, as shown in Format 1.

14. a. With total Southern Region expenses as the dependent variable, for each separate expense classification listed in Format 1, perform regression analyses with the following

independent variables: (1) net UPIS; (2) customers; (3) employees; (4) system delivery; (5) number of customers; (6) gross revenue; (7) total payroll; (8) total assets; and (9) total number of vouchers issued. Follow the same form as Kentucky-American's response to Item 9 of the Commission's January 10, 1992 Order.

b. Provide a summary of the regression analyses of the Southern Region Expenses, as shown in Format 1.

15. a. With the total Kentucky-American expenses as the dependent variable, for each separate expense classification listed in Format 1, perform regression analyses with the following independent variables: (1) net UPIS; (2) customers; (3) employees; (4) system delivery; (5) number of customers; (6) gross revenue; (7) total payroll; (8) total assets; and (9) total number of vouchers issued. Follow the same form as Kentucky-American's response to Item 9 of the Commission's January 10, 1992 Order.

b. Provide a summary of the regression analyses of Kentucky-American expenses, as shown in Format 1.

16. a. Based on the regression analyses performed in response to Items 13(a), 13(b), 14(a), and 15(a) above, and Item 9 of the Commission's January 10, 1992 Order, determine which is the one best allocator for each expense classification. Include for each category the reason for the choice and the assumptions used.

b. Using the allocators chosen in 16(a), recalculate the allocation of the Service Company charges as shown in Format 2. Provide all workpapers, calculations, and assumptions used in the recalculation.

c. Compare the results obtained in 16(b) with the response to Item 51 of the Commission's Order of November 15, 1991, as shown in Format 2, attached hereto.

17. In response to Item 14 of the Commission's January 10, 1992 Order, Kentucky-American referenced its response to Item 104 of the Attorney General's first information request. The response referenced by Kentucky-American did not address the information requested by the Commission.

a. Provide an analysis to show that the Service Company's fixed customer billing charges are dependent on the number of customers. Include all workpapers, calculations, and assumptions used in this analysis.

b. Provide an itemized schedule detailing the Service Company customer billing expenses directly related to the number of bills.

c. Provide an itemized schedule detailing the Service Company customer billing expenses that are considered fixed.

18. In Item 1 of the Commission's January 10, 1992 Order, the Commission asked, "Would it not be more appropriate to divide total corporate and Service Company expenses into the separate classifications or functions listed in response to Item 51 of the Commission's Order of November 15, 1991, and then formulate individual allocation factors for each expense classification?" The response given by Kentucky-American's witness was that, "the question goes beyond the purpose of my testimony." Kentucky-American should have a witness capable of responding to the request and, thus, should file a response.

19. The total test-period Service Company charges of \$1,806,251, provided in response to Item 15 of the Commission's Order of January 10, 1992, reduced by the direct Service Company charges of \$628,164 results in a subtotal of \$1,178,087, which is \$38,882 less than the allocated charges of \$1,139,205, listed in response to Item 17(a) of that same Order. Provide an explanation of the difference.

20. Refer to Kentucky-American's response to Item 19(a) of the Commission's January 10, 1992 Order:

a. Kentucky-American stated that its current inventory control system requires employee overtime. Provide an explanation as to why the overtime is required and list the factors that contribute to the overtime.

b. Wouldn't the appropriate policies and procedures related to the handling of the inventory give Kentucky-American the ability to better maintain its inventory at a reasonable level and not require any overtime to be performed? If no, why not?

c. Why haven't the preliminary goals been set for reducing inventory?

d. How has Kentucky-American cost justified the RAMPS inventory module?

21. In response to Item 22 of the Commission's January 10, 1992 Order, Kentucky-American provided a comparison of the lead/lag study provided in this proceeding with the lead/lag study filed by Kentucky-American in a prior rate case. Provide a detailed explanation as to why Kentucky-American footnoted the

expense categories of Regulatory Expense and Insurance, Other than Group as not applicable in the current case.

22. In Case No. 10423,³ Kentucky-American sought the use of a step increase similar to the request in this proceeding. In that proceeding the Commission determined that Kentucky-American's proposal would not, "allow the Commission adequate opportunity to fully review the proposed tariff, the additional investment in plant, and its associated revenue requirement. Any additional suspension period required would tend to negate Kentucky-American's purpose for requesting deviation, to substantially reduce or eliminate regulatory lag."

a. Explain the changes that have occurred since Case No. 10423 that now justify the adoption of the proposed step increase.

b. Provide a detailed analysis of the differences between the step tariff proposed in Case No. 10423 and the step increase proposed in this case.

23. Kentucky-American stated in response to Item 24 of the Commission's January 10, 1992 Order, that if granted the proposed step increase, Kentucky-American would postpone filing its next rate case for 6 months or until December 1992. However, in response to Item 25 of that same Order, Kentucky-American stated

³ Case No. 10423, The Tariff Application of Kentucky-American Water Company Procedure for Computing Revenue Requirements, Order dated May 9, 1989.

that with the impact of the 1992 construction budget and with approval of committed construction and step increases, Kentucky-American will file its next rate case in June 1992. Which response is correct?

24. The step increase as proposed by Kentucky-American assumes that operations, economic trends, and the overall cost of capital will remain constant between this proceeding and the filing date of the step increase. What effect, if any, would changes in operations, economic trends, and the cost of capital have on Kentucky-American's proposal?

25. In response to Item 29 of the Commission's January 10, 1992 Order, Kentucky-American stated that the construction projects, "are necessary to assure an adequate level of service to existing and normal anticipated customer demands."

a. Will the proposed construction projects increase the production capacity of Kentucky-American?

b. Are the proposed construction projects necessary to meet the water supply requirements of Kentucky-American's current level of customers?

c. Are the proposed construction projects necessary to meet the water supply requirements of Kentucky-American's projected 1992 customers?

26. a. In response to Item 32(a) of the Commission's January 10, 1992 Order, Kentucky-American stated that, "The company did not feel it was appropriate to reduce deferred taxes in rate base by the \$150,930 similar to the treatment of the

depreciation expense and reserve adjustments." Provide a detailed explanation as to why Kentucky-American has this opinion.

b. Is the \$150,930 reduction in accelerated deferred tax expense due to the turn around of the existing deferred taxes being greater than the accumulations of the deferred taxes associated with the plant additions?

27. In response to Item 34(a) of the Commission's January 10, 1992 Order, Kentucky-American referenced the preventive maintenance expenses of \$8,000 that are associated with its proposed plant replacement. Provide the supporting workpapers, calculations, and assumptions used to arrive at the \$8,000 estimate.

28. Refer to Kentucky-American's response to Item 37 of the Commission's January 10, 1992 Order:

a. Is Mr. Edens correct in his statement that 25 hours of overtime per week will be eliminated when the additional production operator is hired at Richmond Road Station?

b. Would it be correct to base the adjustment on annual overtime hours of 1,300 rather than the proposed 666 hours?

29. In Case Nos. 89-348⁴ and 10481,⁵ were the post test-period employees hired before the cases were filed or

⁴ Case No. 89-348, Notice of Adjustment of the Rates of Kentucky-American Water Company effective on January 28, 1990, Order dated June 28, 1990.

⁵ Case No. 10481, Notice of Adjustment of the Rates of Kentucky-American Water Company Effective on February 2, 1989, Order dated August 22, 1989.

before the Commission's final Orders were issued in those proceedings?

30. Refer to pages 16 through 18 of Mr. Edens' direct testimony. For each proposed additional employee, provide the following information when available:

- a. The date hired;
- b. The first full work day;
- c. The number of people interviewed; and
- d. The actual annual salary.

31. Refer to Kentucky-American's response to Item 41 of the Commission's January 10, 1992 Order:

a. Does the merit increase guide allow for pay increases of 3 to 12 percent depending on the employee's performance?

b. If the answer is yes, provide Kentucky-American's justification for granting pay increases in excess of 10 percent.

c. Recalculate test-period non-union wages and the associated payroll expenses to reflect a cap of 5 percent on incentive pay increases. Include all workpapers, calculations, and assumptions used in the recalculation.

32. Refer to Kentucky-American's response to Item 43 of the Commission's January 10, 1992 Order:

a. Was it a management decision to defer Kentucky-American's hydrant painting program?

b. If yes, explain why the failure to perform routine maintenance in the past should result in the allowance of the unamortized cost in rate base.

33. Refer to Kentucky-American's response to Item 44 of the Commission's January 10, 1992 Order:

a. Kentucky-American stated that its investigation or evaluation revealed that at the present time a radio telemetry system would not be cost justified. Since the evaluation did not directly result in the installation of the system, explain why it would not be considered similar to an abandonment.

b. Before a radio telemetry system is installed, will Kentucky-American perform another investigation into the cost effectiveness?

34. Provide a detailed analysis that shows how direct Service Company charges directly relate to the number of customers. Include all workpapers, calculations, and assumptions used in the analysis.

35. Refer to Kentucky-American's response to Item 50 of the Commission's January 10, 1992 Order. Provide the following information when available:

a. The hiring date of the temporary service clerks.

b. The actual hourly rate paid.

c. The temporary agency used to hire the temporary service clerks.

d. The daily hours worked in the first full week of employment.

e. Will the expenses for the temporary service clerks be recurring in nature?

36. In response to Item 52 of the Attorney General's first data request, Kentucky-American stated that it was charged for

data processing services received from the data processing center in Richmond, Indiana. Provide a detailed itemized list of the data processing services Kentucky-American received from the Richmond center.

37. Refer to Kentucky-American's response to Item 101 of the Attorney General's first data request. Explain the criteria the Service Company used in setting the percentage increases and how each employee is evaluated in the process.

38. In response to Item 118 of the Attorney General's first information request, Kentucky-American stated that the following commissions recognize non-cash items as an element of working capital: Tennessee, Maryland, and Virginia:

a. Provide any form of written policy or Orders from these three Commissions where non-cash items are discussed in reference to lead/lag studies.

b. Is the Service Company aware of any other commissions that have allowed non-cash items in a lead/lag study?

Done at Frankfort, Kentucky, this 31st day of January, 1992.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:


Executive Director

KENTUCKY-AMERICAN WATER COMPANY

CASE NO. 91-361

Comparison of Regression Analyses Results

ACCOUNTING

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYEES			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

ADMINISTRATIVE

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYEES			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

CUSTOMER RELATIONS

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYEES			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

TREASURY

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYEES			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

CUSTOMER BILLING & ACCOUNTING

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYEES			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

DATA PROCESSING

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYEES			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

KENTUCKY-AMERICAN WATER COMPANY

CASE NO. 91-361

Comparison of Regression Analyses Results

EMPLOYER RELATIONS

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYERS			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

CORPORATE SECRETARIAL

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYERS			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

ENGINEERING

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYERS			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

WATER QUALITY

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYERS			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

Format 1
Page 2 of 2

AUTHORIZATION/MAINTENANCE

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYERS			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

CONSTRUCTION

INDEPENDENT VARIABLE	T-VALUE	DURBIN-WATSON STATISTIC	COEFFICIENT DETERMINATION
NET UPIS			
CUSTOMERS			
EMPLOYERS			
SYSTEM DELIVERY			
CUSTOMER BILLS			
GROSS REVENUES			
TOTAL PAYROLL			
TOTAL ASSETS			
TOTAL NO. OF VOUCHERS			

KENTUCKY-AMERICAN WATER COMPANY

CASE NO. 91-361

American Waterworks Service Company Charges

<u>Description</u>	<u>Account Number</u>	<u>Amount</u>
Administrative		
Region Office		
General Office		
Engineering		
Region Office		
General Office		
Customer Relations		
Region Office		
General Office		
Employee Relations		
Region Office		
General Office		
Water Quality		
Region Office		
General Office		
Corporate Secretarial		
Region Office		
General Office		
Accounting		
Region Office		
General Office		
Treasury		
Region Office		
General Office		
Data Processing		
Region Office		
General Office		